

METHOD AND DEVICE FOR THE CONTACTLESS DETECTION OF FLAT OBJECTS

ABSTRACT

The invention relates to a method and a device for the contactless detection of flat objects, particularly in sheet form, such as paper, films, foils, plates and similar flat materials or packs.

In said methods and devices, e.g. in the printing industry there is a need for bringing about a reliable, precise detection of single, missing or multiple sheets, particularly double sheets of the flat objects.

For this purpose the invention provides a very flexible solution usable over a very wide gram weight or weight per unit area range, in that at least one correction characteristic is supplied to the evaluating device downstream of the sensor device, specifically the receiver, by means of which the characteristic of the input voltage of the measuring signal in the receiver is so simulated as a function of the gram weight or weight per unit area of the flat objects as a target characteristic that there is a linear or almost linear dependence or a characteristic approximated to the ideal characteristic for single sheet detection in the form of a target characteristic.

For increasing detection reliability and for further extending the material spectrum compared with a correction characteristic method-based sensor, it is also possible to combine sensors and sensor devices.